## **CLAIMS**

1. A system comprising:

one or more aperture-ingress-side surfaces;

one or more aperture-egress-side surfaces; and

said one or more aperture-ingress-side surfaces positioned such that light originating external to at least one of the one or more aperture-ingress-side surfaces is either allowed to enter an aperture ingress or is substantially reflected in a direction such that re-reflection though the aperture ingress is substantially minimized.

- 2. The system of Claim 1, wherein the system comprises:

  a camera, an optical communications system, an imaging system, a test system, and a measurement system.
- 3. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces comprise:

  one or more flat surfaces.
- 4. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces comprise:

  one or more curved surfaces.
- 5. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces comprise:

  said one or more aperture-ingress-side surfaces treated to substantially reflect light.

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- 6. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces comprise:

  said one or more aperture-ingress-side surfaces treated to substantially absorb light.
- 7. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces positioned such that light originating external to at least one of the one or more side-ingress-side surfaces is either allowed to enter an aperture ingress or is substantially reflected in a direction such that re-reflection though the aperture ingress is substantially minimized comprises:

at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged.

8. The system of Claim 7, wherein said at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:

the at least one flat surface placed at an acute angle relative to a plane defined by an ingress of the aperture.

- 9. The system of Claim 7, wherein the least one flat surface angled such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:
- be at least one flat surface placed at an angle whereby the light rays obeying the law of reflection are directed along a path such that, absent re-reflection, the light rays will not cross a plane defined by an ingress of the aperture.
- 10. The system of Claim 1, wherein said one or more aperture-ingress-side surfaces positioned such that light originating external to at least one of the one or more aperture-ingress-side surfaces is either allowed to enter an aperture ingress or is substantially reflected in

a direction such that re-reflection though the aperture ingress is substantially minimized comprises:

at least one durved surface positioned such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged.

11. The system of claim 10, wherein said at least one curved surface positioned such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:

the at least one curved surface placed at an angle whereby the light rays obeying the law of reflection are directed along a path such that, absent re-reflection, the light rays will not cross a plane defined by an ingress of the aperture.

12. The system of Claim 1, further comprising: an enclosure treated to substantially absorb light.



- 13. A system comprising:a low-backscatter aperture structure.
- 14. The system of Claim 13, wherein the system comprises:
  a camera, an optical communications system, an imaging system, a test system, and a measurement system.
- 15. The system of Claim 13, wherein said low-backscatter aperture structure comprises:

at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged.

16. The system of Claim 15, wherein said at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprise:

at least two flat surfaces forming a V shape.

17. The system of Claim 15, wherein said at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:

the at least one flat surface forming a truncated cone shape.

18. The system of Claim 15, wherein said at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:

said at least one flat surface treated to substantially absorb light.

19. The system of Claim 15, wherein said at least one flat surface oriented such that light rays impinging thereon are substantially reflected in a direction other than a direction from which said light rays impinged comprises:

said at least one flat surface treated to substantially reflect light.

20. The system of Claim 13, further comprising: an enclosure treated to substantially absorb light.